PART 1 GENERAL

1.1 SUMMARY
A. Section Includes: Requirements for clearing of all areas within the Contract limits and other areas shown, including work designated in permits and other agreements, in accordance with the requirements of Division 1.

B. Related Work Specified in Other Sections Includes:
   1. Section 02050 - Demolition
   2. Section 02222 - Excavation - Earth and Rock
   3. Section 02223 - Backfilling
   4. Section 02400 – Lawn Restoration

1.2 DEFINITIONS
A. Clearing: Clearing is the removal from the ground surface and disposal, within the designated areas, of trees, brush, shrubs, down timber, decayed wood, other vegetation, rubbish and debris as well as the removal of fences.

B. Grubbing: Grubbing is the removal and disposal of all stumps, buried logs, roots larger than 1-1/2 inches, matted roots and organic materials.

PART 2 PRODUCTS
Not Used

PART 3 EXECUTION

3.1 TREE REMOVAL

NOTE: Edit as required.

A. Tree Removal Within Property Limits: Remove trees and shrubs within the (limits of the right-of-way) (property limits) unless otherwise indicated.

1. Remove trees and shrubs to avoid damage to trees and shrubs designated to remain.
2. Grub and remove tree stumps and shrubs felled within the (property limits) (right-of-way) to an authorized disposal site. Fill depressions created by such removal with material suitable for backfill as specified in Section 02223.

B. Tree Removal Outside Property Limits: Do not cut or damage trees outside the (right-of-way) (property limits) unless shown to be removed or unless written permission has been obtained from the property owner. Furnish three copies of the written permission before removal operations commence.

C. If the land owner desires the timber or small trees, the CONTRACTOR shall cut and neatly pile it in 4 ft. lengths for removal by the OWNER; otherwise, the CONTRACTOR shall dispose of it by hauling it away from the project site.

3.2 TREES AND SHRUBS TO BE SAVED

NOTE: Select locations which require protection and edit as required.

A. Protection: Protect trees and shrubs within the (construction site) (right-of-way) (construction strip) that are so delineated or are marked in the field to be saved from defacement, injury and destruction.

1. Work within the limits of the tree drip line with extreme care using either hand tools or equipment that will not cause damage to trees.
   a. Do not disturb or cut roots unnecessarily. Do not cut roots 1-1/2 inches and larger unless approved.
   b. Immediately backfill around tree roots after completion of construction in the vicinity of trees.
   c. Do not operate any wheeled or tracked equipment within drip line.

2. Protect vegetation from damage caused by emissions from engine-powered equipment.

3. During working operations, protect the trunk, foliage and root system of all trees to be saved with boards or other guards placed as shown and as required to prevent damage, injury and defacement.
   a. Do not pile excavated materials within the drip line or adjacent to the trunk of trees.
   b. Do not allow runoff to accumulate around trunk of trees.
   c. Do not fasten or attach ropes, cables, or guy wires to trees without permission. When such permission is granted, protect the tree before
making fastening or attachments by providing burlap wrapping and softwood cleats.

d. The use of axes or climbing spurs for trimming will not be permitted.
e. Provide climbing ropes during trimming.

4. Remove shrubs to be saved, taking a sufficient earth ball with the roots to maintain the shrub.

a. Temporarily replant if required, and replace at the completion of construction in a condition equaling that which existed prior to removal.
b. Replace in kind if the transplant fails.

5. Have any tree and shrub repair performed by a tree surgeon properly licensed by the State of Florida and within 24 hours after damage occurred.

3.3 CLEARING AND GRUBBING

A. Clearing: Clear all items specified to the limits shown and remove cleared and grubbed materials from the site.

1. Do not start earthwork operations in areas where clearing and grubbing is not complete, except that stumps and large roots may be removed concurrent with excavation.

2. Comply with erosion, sediment control and storm management measures as specified in Division 1.

B. Grubbing: Clear and grub areas to be excavated, areas receiving less than 3 feet of fill and areas upon which structures are to be constructed.

1. Remove stumps and root mats in these areas to a depth of not less than 18 inches below the subgrade of sloped surfaces.

2. Fill all depressions made by the removal of stumps or roots with material suitable for backfill as specified in Section 02223.

C. Limited Clearing: Clear areas receiving more than 3 feet of fill by cutting trees and shrubs as close as practical to the existing ground. Grubbing will not be required.

D. Dispose of all material and debris from the clearing and grubbing operation by hauling such material and debris away to an approved dump. The cost of disposal (including hauling) of cleared and grubbed material and debris shall be considered
a subsidiary obligation of the Contractor; the cost of which shall be included in the prices bid for the various classes of work.

3.4 TOPSOIL

A. Stripping: Strip existing topsoil from areas that will be excavated or graded prior to commencement of excavating or grading and place in well-drained stockpiles in approved locations.

3.5 PRESERVATION OF DEVELOPED PRIVATE PROPERTY

A. The CONTRACTOR shall exercise extreme care to avoid unnecessary disturbance of developed private property along the route of the construction. Trees, shrubbery, gardens, lawns, and other landscaping, which in the opinion of the ENGINEER must be removed, shall be replaced and replanted to restore the construction easement to the condition existing prior to construction.

B. All soil preservation procedures and replanting operations shall be under the supervision of a nursery representative experienced in such operations.

C. Improvements to the land such as fences, walls, outbuildings, and other structures which of necessity must be removed, shall be replaced with equal quality materials and workmanship.

D. Clean up the construction site across developed private property directly after construction is completed upon approval of the ENGINEER.

E. Any commercial signs, disturbed or removed, shall be restored to their original condition within 24 hours.

3.6 PRESERVATION OF PUBLIC PROPERTY

A. The appropriate paragraphs of Articles 3.5 and 3.6 of these Specifications shall apply to the preservation and restoration of public lands, parks, rights-of-way, easements, and all other damaged areas.